IN THE CLAIMS:

Claim 1 (currently amended): Reactive polymers and copolymers ~~based on~~ comprising N-(2hydroxypropyl)methacrylamide for preparation of polymeric drugs, modification of biologically active proteins and preparation of gene delivery systems, ~~characterized in that~~ wherein they contain minimally 60 % of monomer units ~~N-(2-hydroxypropyl)methacrylamid~~ N-(2-hydroxypropyl)-methacrylamide and reactive thiazolidine-2-thione groups that are either a component of the reactive monomer units or are bound through the nitrogen of the reactive thiazolidine-2-thione groups to the carbonyl group that is a component of a linker at the end of the polymer chain.

Claim 2 (currently amended): Reactive polymers and copolymers according to Claim 1 ~~characterized in that they contain~~ further comprising reactive thiazolidine-2-thione groups in side chains of the polymers or copolymers.

Claim 3 (currently amended): Reactive polymers and copolymers according to Claim 1 ~~characterized in that they contain~~ further comprising reactive thiazolidine-2-thione groups at the ends of the polymer chains.

Claim 4 (currently amended): Reactive copolymers according to Claim 2, ~~characterized in that they consist of~~ further comprising 30 - 3000 monomer units linked in a polymer chain, out of which 60-99. 8 % are N-(2-hydroxypropyl) methacrylamide units and 0.2 - 40% are reactive monomer units ~~consist~~ consisting of N-methacryloylated(Ma) amino acids or oligopeptides containing reactive thiazolidine-2-thione groups of the general

formula Ma-X-TT, where X is 6-aminohexanoic acid or 4-aminobenzoic acid or β-alanine or GlyGly or GlyPhe or GlyPheGly or GlyLeuGly or GlyPheLeuGly or Gly-DL-PheLeuGly or GlyLeuPheGly and TT is a reactive thiazolidine-2-thione group.

Claim 5 (currently amended): Reactive polymers according to Claim 3, ~~characterized in that they consist of~~ further comprising 20 - 150 monomer units linked in a polymer chain composed of N-(2- hydroxypropyl) methacrylamide units and bearing a (3-sulfanylpropanoyl)-thiazolidine-2- thione ~~grouping~~ group at the chain end.

Claim 6 (currently amended): Reactive polymers according to Claim 3 [[5]], ~~characterized in that they contain~~ further comprising 20 - 150 monomer units linked in a polymer chain composed of 95 - 99.9% N-(2-hydroxypropyl)methacrylamide units and 0.1 - 5 % of doxorubicin conjugated to N-methacryloylated oligopeptides of doxorubicin, ~~monomer units of N-methacryloylated oligopeptides of conjugated to doxorubicin~~, where oligopeptides are selected from [[a]] the group consisting of ~~including~~ GlyPheGly, GlyLeuGly, Gly-DL-PheLeuGly, GlyPheLeuGly, GlyLeuPheGly and GlyLeuLeuGly.

Claim 7 (currently amended): Reactive polymers according to Claim 3, ~~characterized in that they consist of~~ further comprising 20 - 2000 monomer units linked in a polymer chain composed of 100% N-(2-hydroxypropyl)methacrylamide units and bearing a (4-cyanopentanoyl)-thiazolidine-2- thione group at the chain end.

Claim 8 (currently amended): Reactive polymers according to Claim 3 [[7]],

~~characterized in that they contain~~ further comprising 20 - 2000 monomer units linked in a polymer chain composed of 95 - 99.9% N-(2-hydroxypropyl)methacrylamide units and 0.1 - 5 % ~~monomer units of N-methacryloylated oligopeptides~~ of doxorubicin conjugated to N-methacryloylated ~~doxorubicin, where~~ oligopeptides wherein the oligopeptides are selected from [[a]] the group ~~including~~ consisting of GlyPheGly, GlyLeuGly, Gly-DL-PheLeuGly, GlyPheLeuGly, GlyLeuPheGly and GlyLeuLeuGly, and bearing (4-cyanopentanoyl)thiazolidine-2-thione group at the chain end.

Claims 9-16 (canceled).